

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A method for decreasing hydrogenolysis during reduction of a slurry containing an oxidized metal catalyst, comprising:

providing a slurry containing a catalyst comprising an oxidized metal and a liquid comprising organic compounds;

contacting at least a portion of the slurry with a reducing gas in a reduction vessel along with carbon monoxide at a concentration between 1 ppm and 5,000 ppm so as in an amount sufficient to decrease hydrogenolysis of at least a fraction of said organic compounds; and

reducing at least a portion of the oxidized metal in the catalyst with at least a portion of said reducing gas to form a catalytic active catalyst.

2. (Original) The method of claim 1 wherein the reduction step is performed at a temperature between 250 and 400°C.

3. (Original) The method of claim 1 wherein the reduction step is performed at a temperature between 300 and 400°C.

4. (Original) The method of claim 1 wherein the reduction step is performed at a temperature between 350 and 400°C.

5. (Original) The method of claim 1 wherein the reducing gas contains hydrogen.
6. (Original) The method of claim 5 wherein the reducing gas has a hydrogen concentration sufficient to reduce at least a portion of oxidized catalytic metal to a catalytically active metal.
7. (Currently amended) The method of claim 5 wherein the reducing gas further comprises at least one gas selected ~~from~~ from the group consisting of any C₁-C₅ light hydrocarbon and mixtures thereof ~~a gaseous hydrocarbons with less than 5 carbon atoms, methane and natural gas.~~
8. (Cancelled)
- 8/9. (Original) The method of claim 1 wherein the catalyst slurry is contacted with carbon monoxide at a concentration between 1 ppm and 2,000 ppm.
- 9/10. (Original) The method of claim 1 wherein the catalyst slurry is contacted with carbon monoxide at a concentration between 1 ppm and 500 ppm.
- 10/11. (Original) The method of claim 1 wherein the portion of said slurry is disposed continuously in the reduction vessel.
- 11/12. (Original) The method of claim 1 wherein the portion of said the slurry is disposed intermittently in the reduction vessel.

12 ~~13~~. (Currently amended) A process for activating a slurry comprising an oxidized metal catalyst and organic compounds while minimizing hydrogenolysis of said organic compounds and producing hydrocarbons from synthesis gas using said activated slurry, comprising:

(a) providing a catalyst slurry containing a catalyst and a liquid comprising organic compounds, wherein the catalyst comprises an oxidized catalytic metal;

(b) contacting the catalyst slurry to a reducing gas along with carbon monoxide at a concentration between 1 ppm and 5,000 ppm so as ~~in an amount sufficient~~ to minimize hydrogenolysis of at least a fraction of said organic compounds;

(c) reducing at least a portion of the oxidized catalytic metal in the catalyst with at least a portion of said reducing gas to form a reduced catalyst and to generate an activated catalyst slurry comprising said reduced catalyst; and

(d) converting at least a portion of a gas feed comprising synthesis gas with at least a portion of said activated slurry comprising said reduced catalyst to form a product stream comprising hydrocarbons in a synthesis reactor.

13 ~~14~~. (Original) The process of claim ¹²~~13~~ wherein the reduction in step (c) is performed at a temperature between 250 and 400°C.

14 ~~15~~. (Original) The process of claim ¹²~~13~~ wherein the reduction in step (c) is performed at a temperature between 300 and 400°C.

12
15 ~~16~~ (Original) The process of claim ~~13~~¹² wherein the reduction in step (c) is performed at a temperature between 350 and 400°C.

16 ~~17~~ (Original) The process of claim ~~13~~¹² wherein the reducing gas contains hydrogen.

17 ~~18~~ The process of claim ~~17~~¹⁶ wherein the reducing gas further comprises at least one gas selected ~~from~~ from the group consisting of any C₁-C₅ light hydrocarbon and mixtures thereof ~~a gaseous hydrocarbons with less than 5 carbon atoms, methane and natural gas.~~

19. (Cancelled)

18 ~~20~~ (Original) The process of claim ~~13~~¹² wherein the catalyst slurry is contacted with carbon monoxide at a concentration between 1 ppm and 2,000 ppm.

19 ~~21~~ (Original) The process of claim ~~13~~¹² wherein the catalyst slurry is contacted with carbon monoxide at a concentration between 1 ppm and 500 ppm.

20 ~~22~~ (Original) The process of claim ~~13~~¹² wherein the reducing step is done in a reduction vessel.

21 ~~23~~ (Original) The process of claim ~~22~~²⁰ further comprising transferring said portion of activated slurry from the reduction vessel to the hydrocarbon synthesis reactor.

22 ~~24~~. (Original) The process of claim ~~23~~²² wherein the transfer is performed while the hydrocarbon synthesis reactor is operational.

23 ~~25~~. (Original) The process of claim ~~24~~²² wherein the portion of said activated slurry is continuously added to the operational hydrocarbon synthesis reactor.

24 ~~26~~. (Original) The process of claim ~~24~~²² wherein the portion of said activated slurry is intermittently added to the operational hydrocarbon synthesis reactor.

25 ~~27~~. (Original) The process of claim ~~24~~²² wherein the transfer is performed before the hydrocarbon synthesis reactor is operational.

26 ~~28~~. (Original) The process of claim ~~24~~²² wherein the activated slurry is transferred entirely in the hydrocarbon synthesis reactor.

27 ~~29~~. (Original) The process of claim ~~17~~¹⁶ wherein the reducing step is done in the hydrocarbon synthesis reactor.

28 ~~30~~. (Currently amended) A method for producing hydrocarbons from synthesis gas with a catalyst slurry and regenerating a spent catalyst slurry, comprising:

reacting synthesis gas with a catalyst comprising a catalytically active metal to form hydrocarbons and product water in a synthesis reactor comprising a slurry, wherein the slurry contains said catalyst and said hydrocarbons;

converting at least a portion of said catalytically active metal to a ~~[[pa]]~~ partially oxidized catalytic metal simultaneously with reaction to form a partially deactivated slurry;

contacting at least a portion of the partially deactivated slurry with a reducing gas along with carbon monoxide in a reduction vessel at a concentration between 1 ppm and 5,000 ppm so as ~~in an amount sufficient~~ to decrease hydrogenolysis of at least a fraction of said organic compounds;

reducing at least a portion of the oxidized metal in the catalyst with at least a portion of said reducing gas to a catalytic active metal to form an activated catalyst slurry; and

recycling partially or totally said activated slurry to the synthesis reactor.

29 ~~31~~. (New) The method of claim 5 wherein the reducing gas further comprises at least one gas selected from the group consisting of methane and natural gas.

30 ~~32~~. (New) The method of claim ¹⁶~~17~~ wherein the reducing gas further comprises at least one gas selected from the group consisting of methane and natural gas.